

**WHAT IS CLAIMED IS:**

1           1.     A material handling apparatus for mounting on a support structure,  
2     the material handling apparatus comprising:

3                 a telescopic riser portion coupled to the support structure;

4                 a telescopic boom portion coupled to the riser portion;

5                 a telescopic jib portion, coupled to the riser portion;

6                 a hook coupled to the jib portion; and

7                 a control apparatus coupled to each of the riser, boom, and jib  
8     portions,

9                 wherein, each of the telescopic portions can be independently,  
10     selectively moved in a push-pull mode to manipulate material.

1           2.     The material handling apparatus of claim 1, including a rotation  
2     assembly coupled to the support structure and the riser portion, the rotation  
3     assembly rotatable at least 360 degrees.

1           3.     The material handling apparatus of claim 1, wherein the support  
2     structure is mounted on a vehicle.

1           4.     The material handling apparatus of claim 1, including an actuator  
2     coupled to the riser portion and support structure.

1           5.     The material handling apparatus of claim 1, including a second  
2     actuator coupled to the boom portion and the riser portion.

1           6.     The material handling apparatus of claim 1, including a third  
2     actuator coupled to the jib portion and the riser portion.

1           7.     The material handling apparatus of claim 4, 5, or 6, wherein the  
2     actuator is an apparatus selected from a group including a hydraulic machine, a  
3     pneumatic machine, and an electric motor.

1           8.     The material handling apparatus of claim 1, including a control  
2     apparatus is one of mounted on the support structure and remote from the  
3     support structure.

1           9.     The material handling apparatus of claim 3, including an outrigger  
2     assembly coupled to the support structure.

1           10.    A vehicle comprising:  
2                   a support structure coupled to a weight bearing element; and  
3                   a material handling apparatus coupled to the support structure, the  
4     material handling apparatus comprising:  
5                   a telescopic riser portion coupled to the support structure;  
6                   a telescopic boom portion coupled to the riser portion;  
7                   a telescopic jib portion, coupled to the riser portion;  
8                   a hook coupled to the jib portion; and  
9                   a control apparatus coupled to each of the riser, boom, and jib  
10    portions,  
11                   wherein, each of the telescopic portions can be independently,  
12    selectively moved in a push-pull mode to manipulate material.

1           11.    The vehicle of claim 10, including a rotation assembly coupled to  
2     the support structure and the riser portion, the rotation assembly rotatable at  
3     least 360 degrees.

1           12.    The vehicle of claim 10, including an actuator coupled to the riser  
2     portion and support structure.

1           13.    The vehicle of claim 10, including a second actuator coupled to the  
2     boom portion and the riser portion.

1           14.    The vehicle of claim 10, including a third actuator coupled to the jib  
2     portion and the riser portion.

1           15.   The vehicle of claim 12, 13, or 14, wherein the actuator is an  
2   apparatus selected from a group including a hydraulic machine, a pneumatic  
3   machine, and an electric motor.

1           16.   The vehicle of claim 10, including a control apparatus is one of  
2   mounted on the support structure and remote from the support structure.

1           17.   The vehicle of claim 10, including outrigger assembly coupled to  
2   the support structure.

1           18.   The vehicle of claim 10, wherein the support structure is  
2   configured as one of a truck and a trailer.

1           19.   The vehicle of claim 18, wherein the weight bearing element is a  
2   wheel.